



PATENT
Attorney Docket No. DHI-06207

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Yung T. Huang
Serial No.: 09/844,311
Filed: 04/27/01
Entitled: Cells For Detection of Enteroviruses

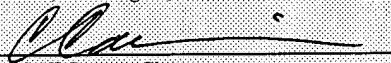
Group No.:
Examiner:

**TRANSMITTAL FOR
INFORMATION DISCLOSURE STATEMENT**

Assistant Commissioner for Patents
Washington, D.C. 20231

CERTIFICATE OF MAILING UNDER 37 CFR § 1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231, on October 1, 2002.

By: 

Cliff Cannon-Cin

Sir or Madam:

Enclosed please find an Information Disclosure Statement, Form PTO-1449 and copy of 20 references for filing in the U.S. Patent and Trademark Office.

In the event a petition is required in order to have this Information Disclosure Statement considered, please consider this a petition therefor.

The Commissioner is hereby authorized to charge any fee or credit overpayment related to this filing to our Deposit Account No. 08-1290. **An originally executed duplicate of this transmittal is enclosed for this purpose.**

Signed on behalf of:

Dated: 10/1/02


Maha A. Hamdan
Registration No. 43,655

MEDLEN & CARROLL, LLP
101 Howard Street, Suite 350
San Francisco, California 94105
415.904.6500



PATENT
Attorney Docket No. DHI-06207

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Yung T. Huang
Serial No.: 09/844,311
Filed: 04/27/01
Entitled: Cells For Detection of Enteroviruses

Group No.:
Examiner:

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

CERTIFICATE OF MAILING UNDER 37 CFR § 1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231, on October 1, 2002.

By: 
Cliff Cannon-Cin

Sir or Madam:

The citations listed below, copies attached, may be material to the examination of the above-identified application, and are therefore submitted in compliance with the duty of disclosure defined in 37 C.F.R. §§ 1.56 and 1.97. The Examiner is requested to make these citations of official record in this application.

The following patents are referred to in the body of the specification, and are relevant for the reasons disclosed therein:

- U.S. Patent No. 5,939,253 issued on 08/17/99 to Scholl *et al.*; and
- U.S. Patent No. 6,168,915 issued on 1/2/01 to Scholl *et al.*.

The following printed documents are referred to in the body of the specification, and are relevant for the reasons disclosed therein:

- Bergelson *et al.* (1994) "Decay-Accelerating Factor (CD55), a Glycosylphosphatidylinositol-Anchored Complement Regulatory Protein, is a Receptor for Several Echoviruses," Proc. Natl. Acad. Sci. 91:6245-6248;

- Bergelson *et al.* (1995) "Coxsackievirus B3 Adapted to Growth in RD Cells Binds to Decay-Accelerating Factor (CD55)," *J. Virol.* 69:1903-1906;
- Clarkson *et al.* (1995) "Characterization of the Echoivirus 7 Receptor: Domains of CD55 Critical for Virus Binding," *J. Virol.* 69:5497-5501;
- Powell *et al.* (1998) "Characterization of echoviruses that bind decay accelerating factor (CD55): evidence that some haemagglutinating strains use more than one cellular receptor," *J. Gen. Virol.* 79:1707-1713;
- Powell *et al.* (1999) "Mapping the binding domains on decay accelerating factor (DAF) for haemagglutinating enteroviruses: implications for the evolution of a DAF-binding phenotype," *J. Gen. Virol.* 80:3145-3152;
- Shafren *et al.* (1995) "Coxsackieviruses B1, B3, and B5 Use Decay Accelerating Factor as a Receptor for Cell Attachment," *J. Virol.* 69:3873-3877;
- Shafren *et al.* (1997) "Coxsackievirus A21 Binds to Decay-Accelerating Factor but Requires Intercellular Adhesion Molecule 1 for Cell Entry," *J. Virol.* 71:4736-4743;
- Martino *et al.* (1998) "Cardiovirulent Coxsackieviruses and the Decay-Accelerating Factor (CD55) Receptor," *Virol.* 244:302-314;
- Karnauchow *et al.* (1996) "The HeLa Cell Receptor for Enterovirus 70 Is Decay-Accelerating Factor (CD55)," *J. Virol.* 70:5143-5152;
- Karnauchow *et al.* (1998) "Short Consensus Repeat Domain 1 of Decay-Accelerating Factor Is Required for Enterovirus 70 Binding," *J. Virol.* 72:9380-9383; and
- GenBank Accession # M15799.

Applicant has become aware of the following printed documents which may be material to the examination of this application:

- U.S. Patent No. 5,686,305 issued 11/11/97 to Wang *et al.* Wang *et al.* discloses a cell line from *Pseudaletia unipuncta* embryos which has the ability to be infected by the baculoviruses *Pseudaletia unipuncta* nuclear polyhedrosis virus (PuNPV) and *Pseudaletia unipuncta* granulosis virus (PuGV). However, Wang

et al. does not disclose a transgenic buffalo green monkey kidney (BGMK) cell line, or a transgenic African green monkey kidney (CV-1) cell line;

- U.S. Patent No. 5,811,282 issued on 9/22/98 to Chesebro *et al.* Chesebro *et al.* discloses a HeLa cell line which is susceptible to infection by human immunodeficiency virus. However, Chesebro *et al.* does not disclose a transgenic buffalo green monkey kidney (BGMK) cell line, or a transgenic African green monkey kidney (CV-1) cell line;
- U.S. Patent No. 5,985,642 issued on 11/16/99 to Foster *et al.* Foster *et al.* discloses an immortalized chicken embryonic fibroblast cell line which are used for virus propagation, recombinant protein expression and recombinant virus production. However, Foster *et al.* does not disclose a transgenic buffalo green monkey kidney (BGMK) cell line, or a transgenic African green monkey kidney (CV-1) cell line;
- U.S. Patent No. 5,989,805 issued on 11/23/99 to Reilly *et al.* Reilly *et al.* discloses a cell line generated from chicken embryo cells which is used to produce viruses that replicate in chicken embryonated eggs. However, Reilly *et al.* does not disclose a transgenic buffalo green monkey kidney (BGMK) cell line, or a transgenic African green monkey kidney (CV-1) cell line;
- Hierholzer *et al.* (1993) "Sensitivity of NCI-H292 Human Lung Mucoepidermoid Cells for Respiratory and Other Human Viruses," J. Clin. Microbiol. 31:1504-1510. Hierholzer *et al.* discloses that NCI-H292 mucoepidermoid carcinoma cells from human lungs are sensitive for vaccinia virus, herpes simplex virus, adenoviruses, BK polyomavirus, reoviruses, measles virus, respiratory syncytial virus, some strains of influenza virus type A, some enteroviruses, rhinoviruses, parainfluenza virus, and mumps virus. However, Hierholzer *et al.* does not disclose a transgenic buffalo green monkey kidney (BGMK) cell line, or a transgenic African green monkey kidney (CV-1) cell line;
- Spiller *et al.* (2000) "Echoviruses and Coxsackie B Viruses That Use Human Decay-Accelerating Factor (DAF) as a Receptor Do Not Bind the Rodent Analogues of DAF," J. Infect. Diseases 181:340-343. Spiller *et al.* discloses

Chinese hamster ovary (CHO) cells which express either human decay-accelerating factor (DAF), mouse DAF, or rat DAF. However, Spiller *et al.* does not disclose a transgenic buffalo green monkey kidney (BGMK) cell line, or a transgenic African green monkey kidney (CV-1) cell line; and • Ward *et al.* (1994) "Decay-accelerating factor CD55 is identified as the receptor for echovirus 7 using CELICS, a rapid immuno-focal cloning method," EMBO J. 13:5070-5074. Ward *et al.* discloses cloning of the human decay-accelerating factor (CD55) and using the cloned DNA to transfect mouse cells. However, Ward *et al.* does not disclose a transgenic buffalo green monkey kidney (BGMK) cell line, or a transgenic African green monkey kidney (CV-1) cell line.

This Information Disclosure Statement under 37 C.F.R. §§ 1.56 and 1.97 is not to be construed as a representation that a search has been made, that additional information material to the examination of this application does not exist, or that any one or more of these citations constitutes prior art.

Signed on behalf of:

Dated: October 1, 2002


Maha A. Hamdan
Maha A. Hamdan
Registration No. 43,655

MEDLEN & CARROLL, LLP
101 Howard Street, Suite 350
San Francisco, California 94105
415/904-6500